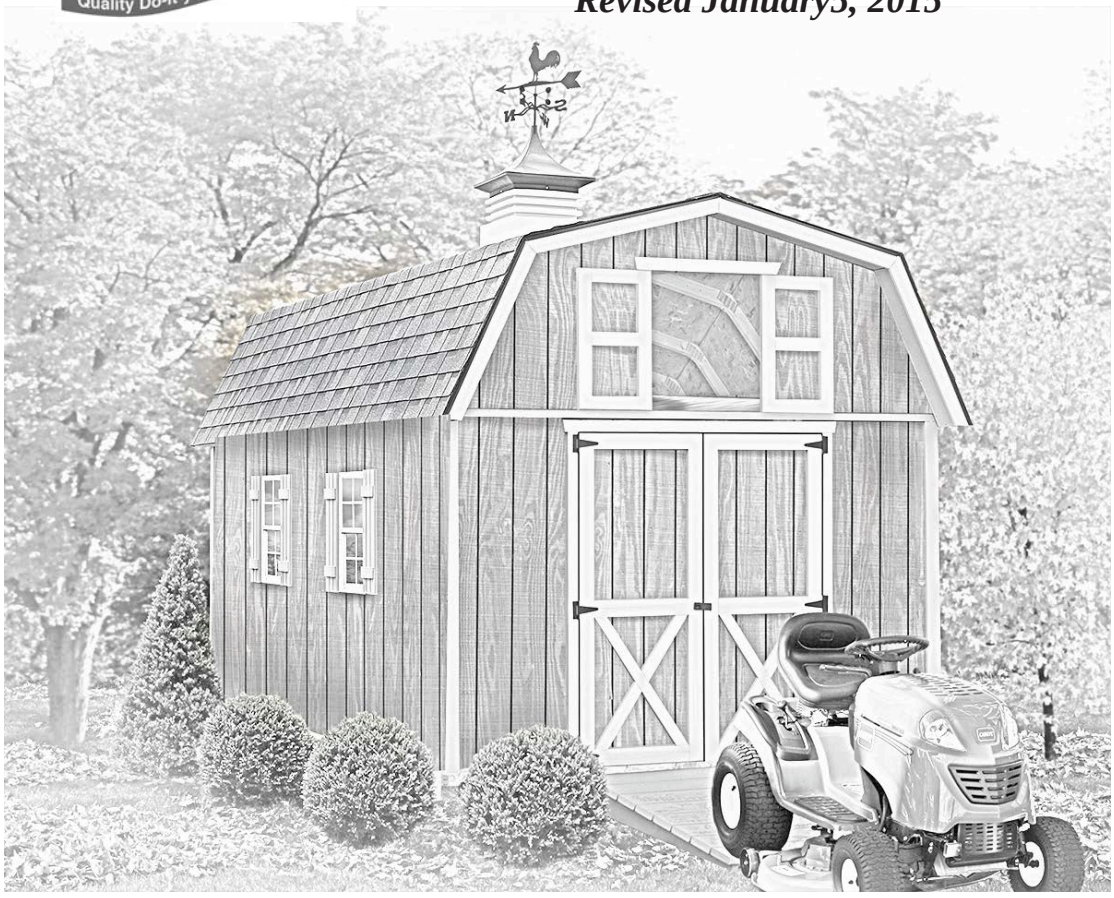
Best Barns USA
Assembly Book

Revised January5, 2015



Deluxe Woodville **10' x 16'**

Manufactured by Reynolds Building Systems, Inc.

205 Arlington Drive Greenville, PA 16125 724-646-3775

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Important Information About Your Shed Kit

This manual will show the assembly for the 16' x 10' Woodville building kit. **If you received duplicate books, use the one with the latest revision date.**

The foundation size should measure 10'-0" wide by 15'-9" long. **Do Not** make the foundation larger than the building size. The siding should project beyond the foundation for water to expel properly from the sidewalls.

Read the instructions before starting the assembly of the building. If you have any questions about assembling the kit, call 800-245-1577. Business hours (8:00-5:00 ET) Monday thru Friday. After business hours call 724-866-HELP (4357) or email to help@barnkits.com.

The material that is included in our kit is listed on the back page. The optional floor package, if purchased, will be supplied by a local lumber supplier.

Our kit does not include the shingles, the quantity needed is listed on **Step 15**. The siding is primed. You will need to apply a finish coat using latex acrylic paint.

Some of the framing lumber was used in the shipping pallet. Unpack the material from the pallets, then unscrew the OSB sheathing, it will be used for the loft flooring. Unscrew the 2x4s from the shipping pallet. This material will be used for wall bracing and wall plates. The bit for the screws is packed in the hardware bag.

Stacking the boards, according to size, will make them easier to find when needed. Some boards have colored ends. All the 72" long 2x4s have black ends, stack these boards together**.**

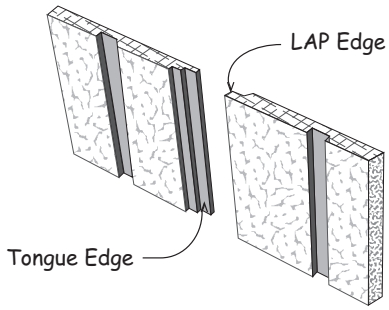
Before you begin construction, be sure to study this assembly manual. Also, obtain a building permit and check all pertinent building code regulations.

Thank you for your purchase.

Bill & Linda Rinella, owners

The siding is made in 4x8 sheets with grooves cut into the face, the long edge is beveled so that the siding overlays where they butt.

To identify which edge we want you to use, we will refer to the edge as either the 'LAP' Edge or the Tongue Edge. Nail siding with 8d galv. nails, spaced 12" apart.



Tool List

- ❑ Hammer & Phillips Screwdriver
- ❑ Framing Square & Level
- ❑ Hand or Circular Saw
- ❑ Power Drill/Screwdriver
- ❑ Measuring Tape
- ❑ **2 - 8' Step Ladders**

Always wear safety glasses when cutting or nailing!

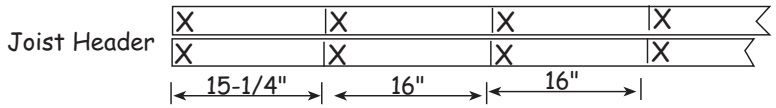
Constructing Details for Deluxe Floor System

Deluxe floors include 4x4 runners, standard floors do not

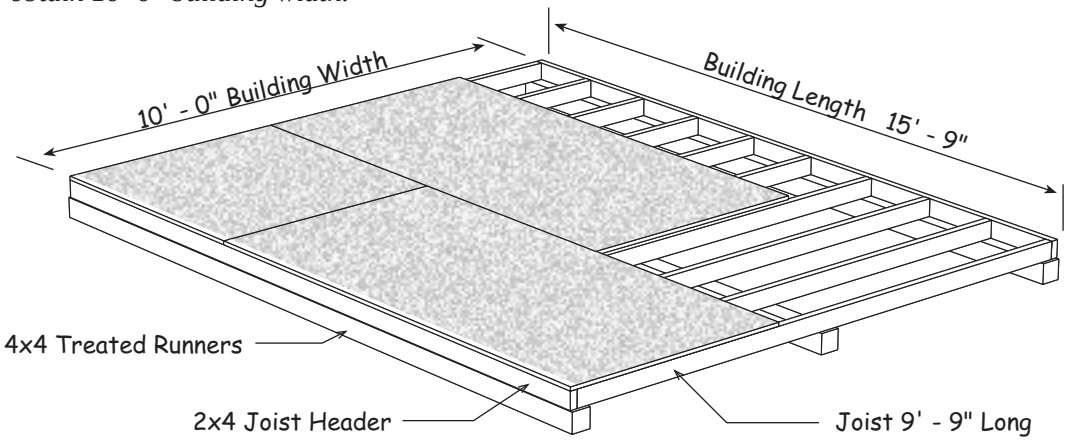
Foundation size is 10'-0" x 15'-9". Check local building codes in your area, the construction may have to change. For a concrete slab, install sill sealer as a moisture barrier between the concrete and the wall plates. Foam sill sealer can be purchased at home centers in rolls 3-1/2" or wider.

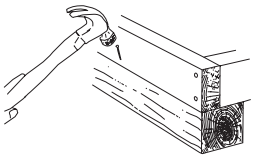
1. Cut 2x4-16' joist headers to 15' - 9".

   Layout for 16" on center joist spacing. 'X' marks where floor joist will be placed.



2. Cut 2x4-10' floor joist to 9'-9". *Treated lumber may be thicker than 1-1/2". Take this into account when cutting the length of floor joists. Shorten joist measurements if necessary to obtain 10'-0" building width.*





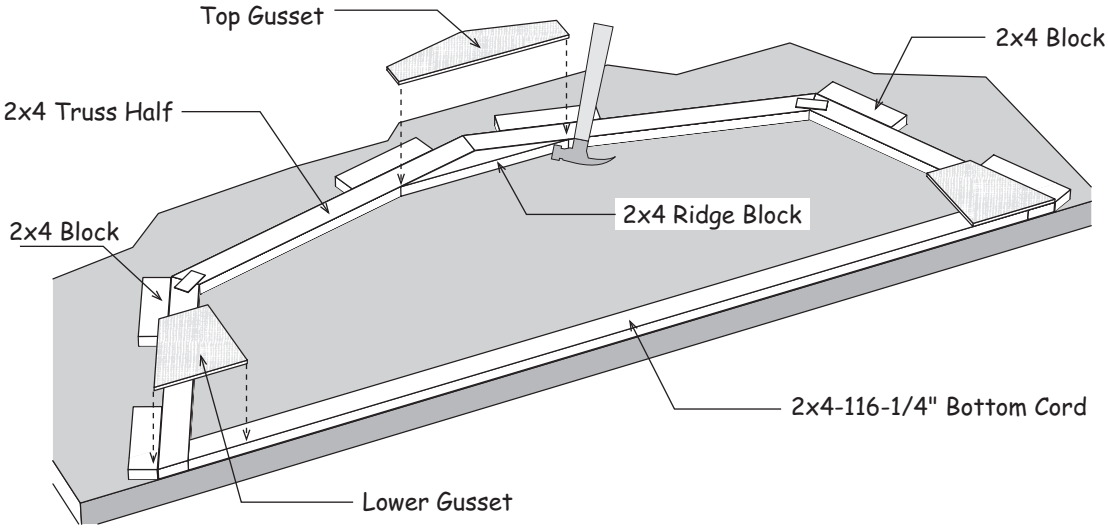
Nail the 2x4s to the 4x4 runners to keep the 2x4 frame from moving.

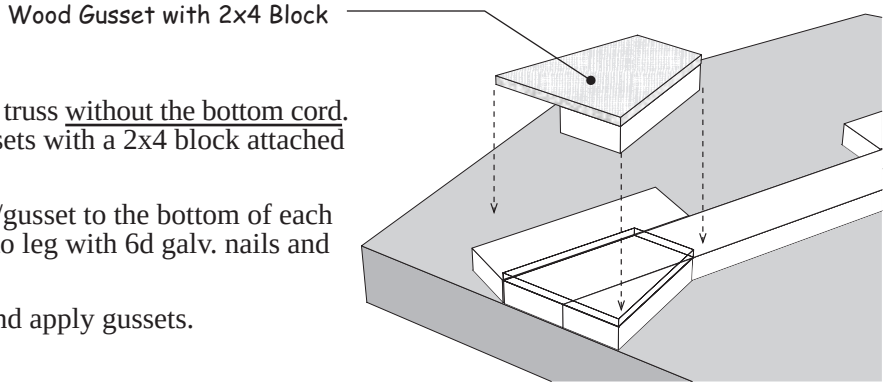
It is important that the floor be level and square. Before nailing the flooring, measure the floor diagonally (corner to corner). Then measure the opposite corners. These measurements will be the same if the floor is square.

Material Description	10' x 16' shed
2x4 Joist Headers	2 pcs. 16'
2x4 Floor Joist	13 pcs. 10'
4x4 Treated Runners	6 pcs. 8'
Flooring 5/8" or 3/4"	5 pcs. 4x8
Screw Floor Nails	2 lb. 8d
Galv. Box Nails	1 lb. 16d

Step 1 Assemble Trusses

1. Position (2) two half trusses between a 116-1/4" long 2x4 bottom cord.
2. Hold truss parts in place by temporarily screwing 2x4 blocks to the floor. There are short 2x4 blocks supplied in the kit for this purpose. Use the 2-1/2" wood screws.
3. Secure the tops together with a 22-3/4" long ridge block and wood gusset. Nail the gusset with (16) sixteen 6d common nails.
4. Secure the truss bottom legs to the bottom cord with wood gussets. **Note**: You may have to spread the truss bottom to fit the bottom 2x4. Use 12 nails per gusset.
5. Assemble (5) five more trusses.
6. Turn trusses over and apply wood gussets to the opposite side.





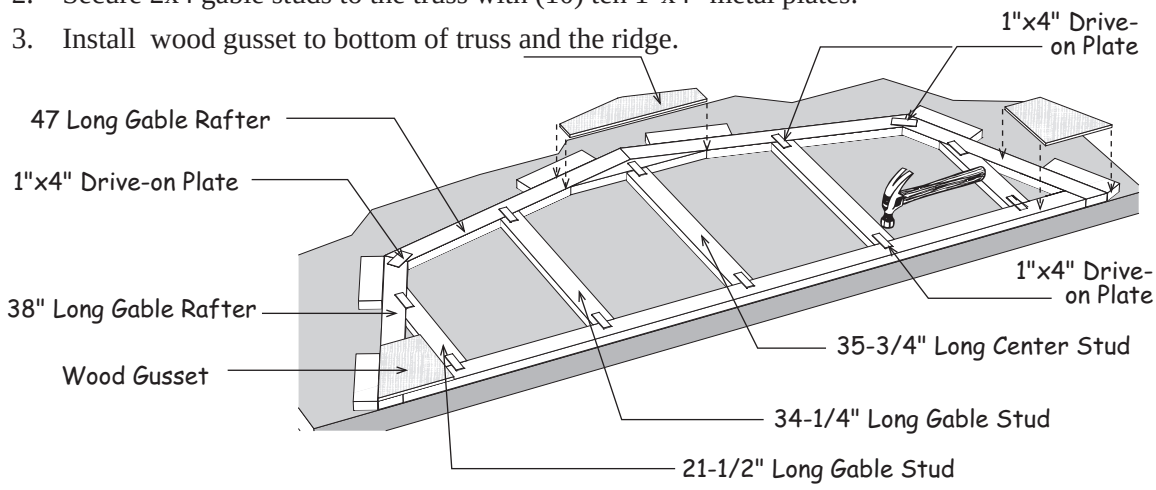
7. Assemble the last truss without the bottom cord. Locate wood gussets with a 2x4 block attached to one side.
8. Attach this block/gusset to the bottom of each truss leg. Secure to leg with 6d galv. nails and wood glue.
9. Turn truss over and apply gussets.

Do Not remove blocks from floor until **Step 2** is completed.

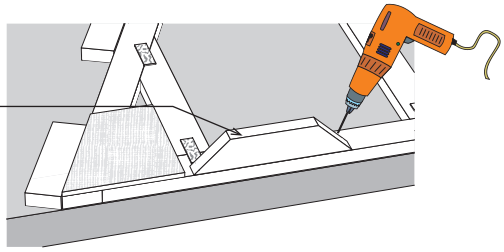
Set these trusses aside. **DO NOT use trusses for assembling the roof gables.**

Step 2 Assemble Rear Gable

1. Place (2) two 47" long and 38" long 2x4 gable rafters, *packed in extension kit*, in the truss jig and secure with 1"x4" drive-on plates. Toenail a ridge block at the ridge.
2. Secure 2x4 gable studs to the truss with (10) ten 1"x4" metal plates.
3. Install wood gusset to bottom of truss and the ridge.

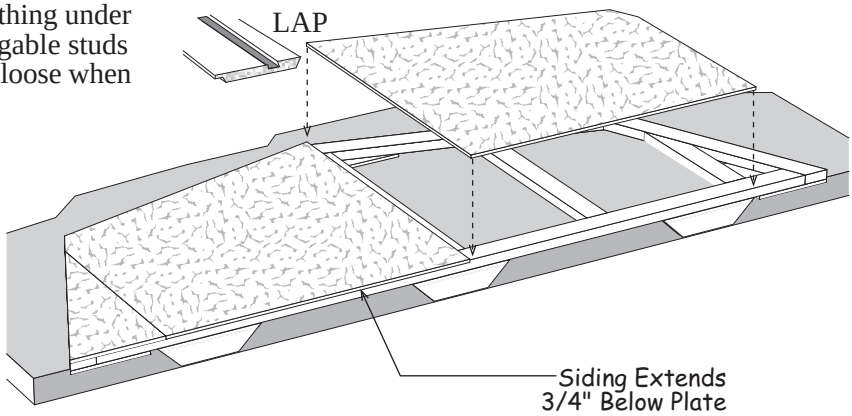


4. Screw (3) three 16" long 2x4 blocks across the bottom of the 2x4 bottom cord. Use 2-1/2" screws.



5. Turn the gable over. Install the siding extending 3/4" below the bottom 2x4. Use 6d galv. nails. Space 12" apart.

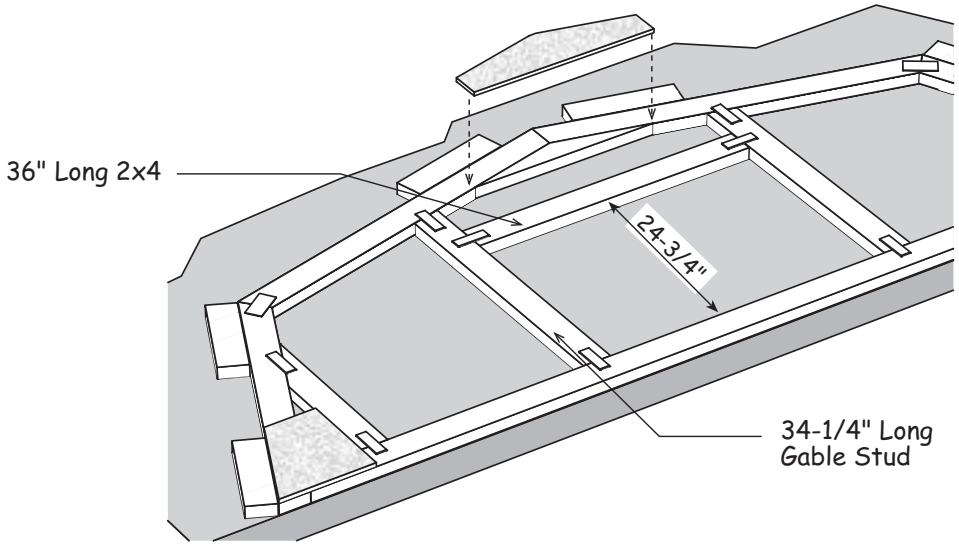
Tip; Lay 2'x4' OSB sheathing under the studs to prevent gable studs from being knocked loose when nailing the siding.



Step 3 Assemble Front Gable

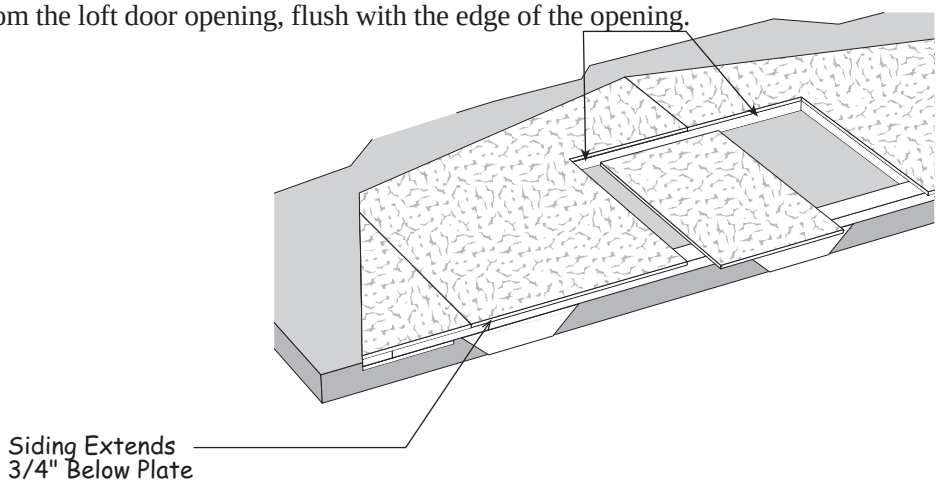
☞ *If you don't need loft access from the outside, attach loft door frames to the gable to create a decorative look and weather tight storage area.*

1. Assemble another gable frame. Install a 36" long 2x4 between the wall studs. If installing operating loft doors, install the 36" long 2x4 between the gable studs where shown below.



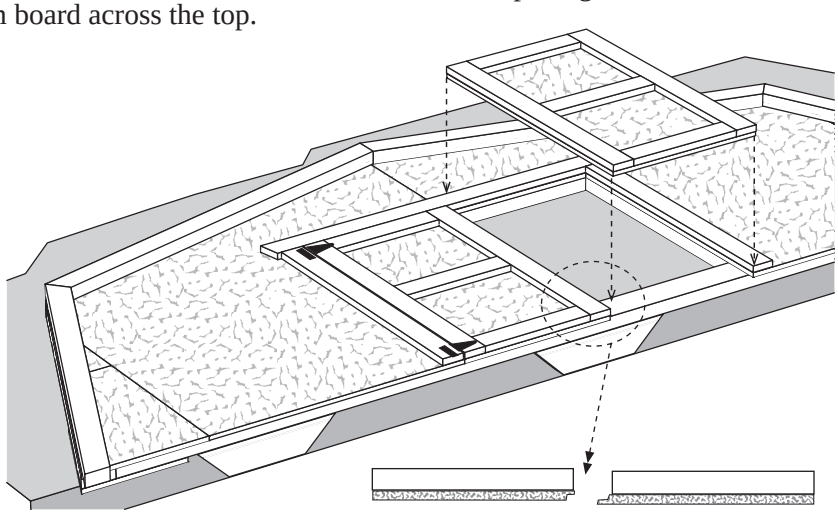
2. Turn the gable over. Install the siding extending 3/4" below the bottom 2x4.

3. Cut siding from the loft door opening, flush with the edge of the opening.

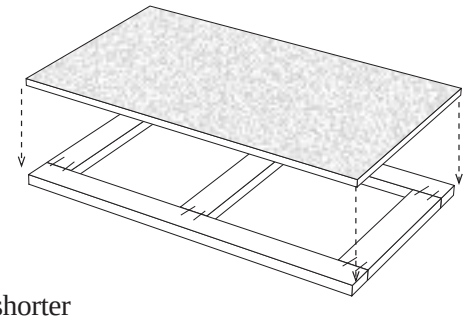


Step 4 Install Front Gable Overhang and Front Loft Doors

1. Apply 47" long 2x3 boards to the front gable. These boards have a blue marking on one end. Install this end at the top. Install 2x3s flush with the top of the gable frame. Use 10d sinkers
2. Install a 42-1/4" long 2x3 at the sides of the gable, flush with the frame.
3. Install 29-1/4" long 1x3 trim boards on each side of the loft door opening. Install a 43" long trim board across the top.



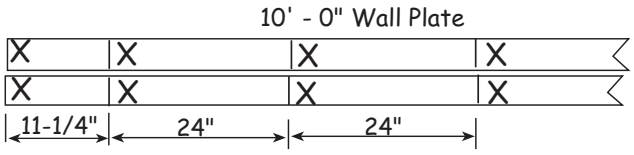
4. Assemble the loft doors. The loft door frames are temporarily held together with corrugated fasteners, this is the back side of the door frame. Place the doors on level surface, face side down. Cut the siding from above step to the size of the door frame. Secure the siding panel to the frame with 1" screws provided.



5. Install loft doors using the smaller 4" hinges. Use the shorter 1-1/4" screws. The screws have a square head. The bit is packed with the screws. Install barrel bolts on the inside.

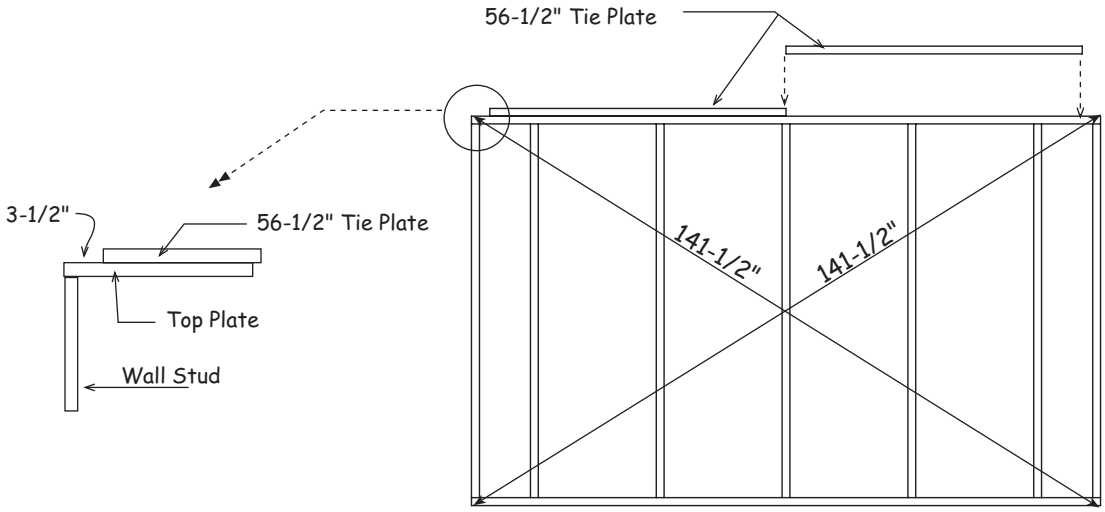
Step 5 Layout Plates for Back Wall

Position (2) two 2x4-10' boards together and indicate with 'X' marks, where the wall studs will be located.

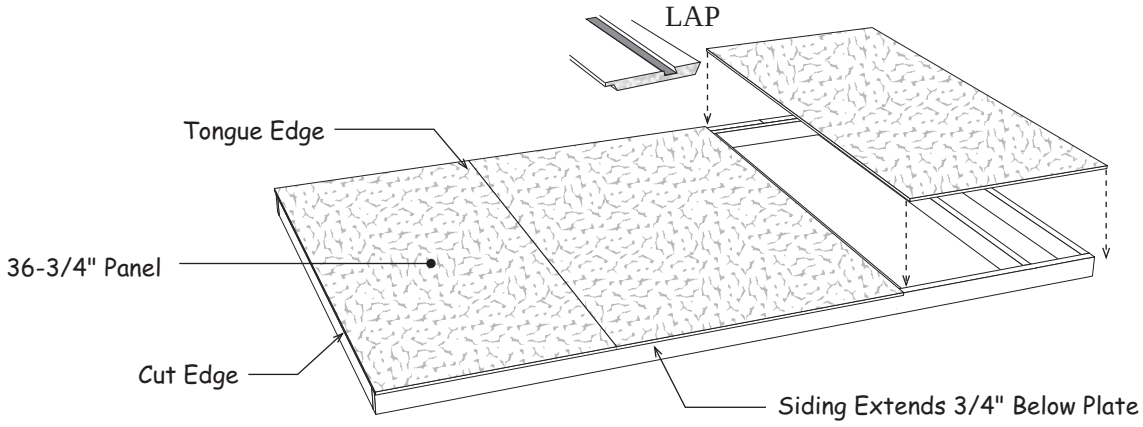


Step 6 Assemble Back Wall

1. Install 72" wall studs between the top and bottom plates. Nail studs to plate using (2) two 10d sinkers on each end of the stud.
2. Install (2) two 56-1/2" long 2x4 as tie plates over the top plate. The 2x4s will be 3-1/2" short of the end of the wall frame.

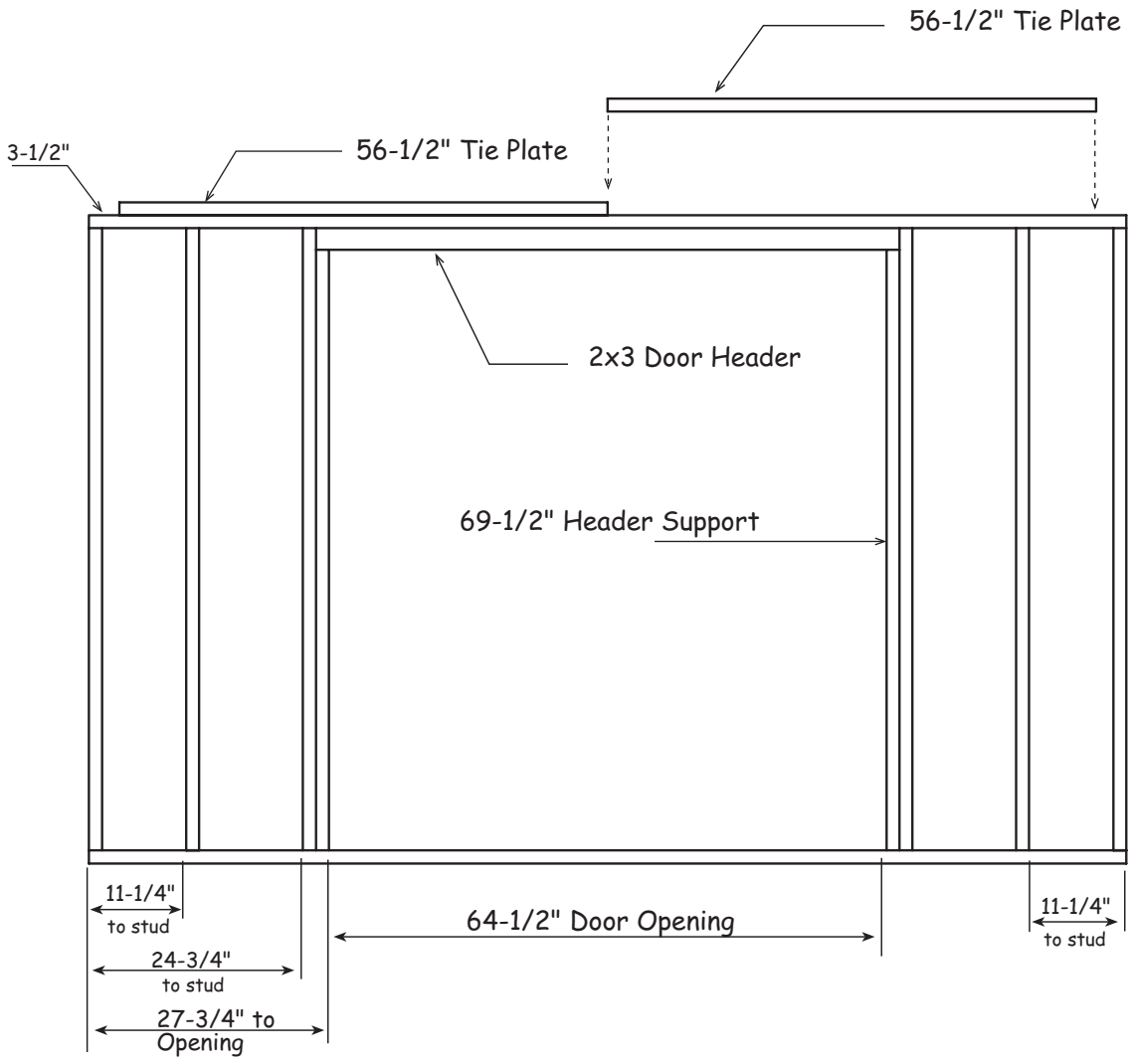


3. Square wall frame. *Measure diagonally (corner to corner).*
4. Locate a 36-3/4" x 77-1/4" siding panel with the 'Tongue' edge. Install the siding panel on the left corner, with the 'cut edge' flush with the end of the wall and flush with the top of the 2x4 tie plate. The siding should extend below the bottom plate. Use the 8d galv. nails spaced 12" on center.
5. Install a 48-3/4" x 77-1/4" siding panel in the center of the wall frame.
6. Install a 36" x 77-1-4" panel witht he 'LAP' edge last.



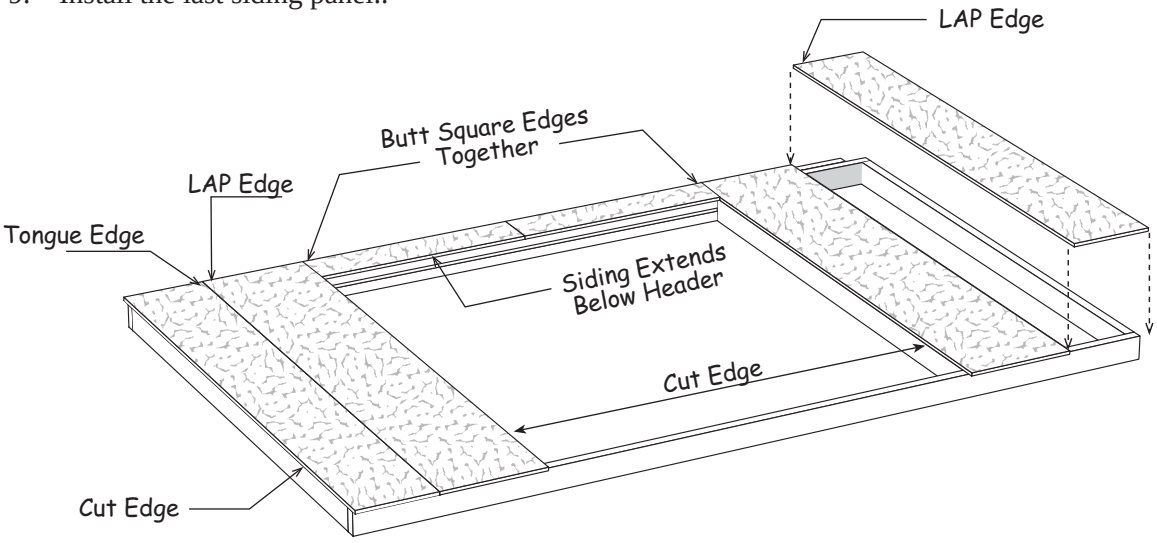
Step 7 Assemble Front Wall Panels

1. Install (6) six 72" wall studs between 2x4 - 10' top and bottom plates.
2. Cut (2) two 2x4-6' boards to 69-1/2" in length. Install a pre-built 2x3 door header and the 2x4s as header support under the door header.
3. Install (2) two 56-1/2" long 2x4 as tie plates over the top plate. The 2x4s will be 3-1/2" short of the end of the wall frame.
4. Square wall frame.



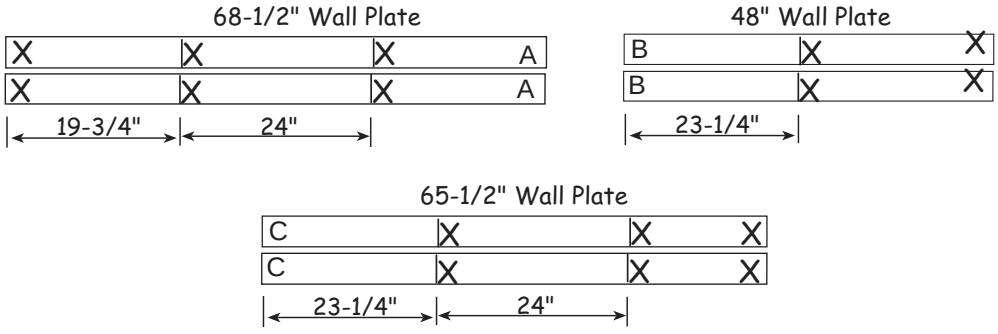
Step 7 Assemble Front Wall Continued

5. Locate a 16" x 77-1/4" siding panel that has a 'LAP' edge. Position the 'cut' edge flush with the left side of the door opening. Do not nail the LAP edge until the other siding is applied.
6. Locate the 12-3/4" wide siding with a 'tongue edge' and install on the left end of the front wall.
7. Install (2) two 6" siding panels over the door opening, flush with the top plate.
8. Install another 16" wide siding panel with the 'cut' edge flush with the side of the door opening.
9. Install the last siding panel..



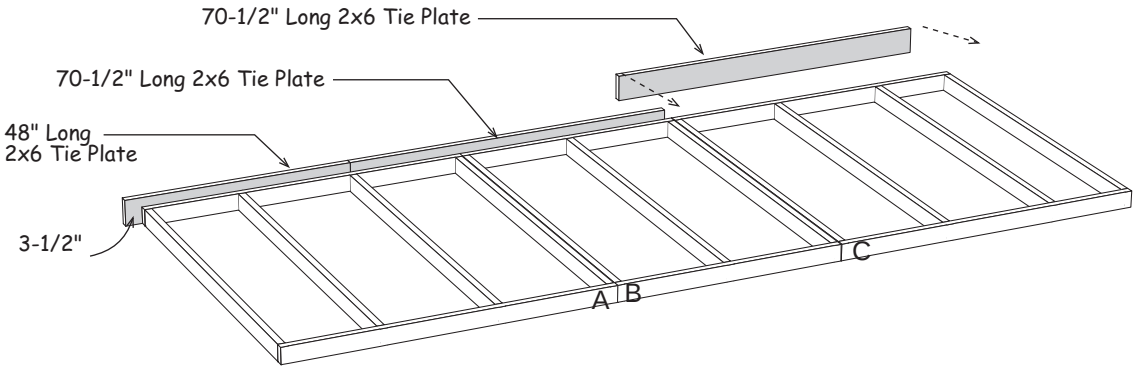
Step 8 Assemble Sidewalls

1. Disassemble the shipping plates. Save the OSB sheathing for the loft floor. Cut (2) two of the 2x4s into (2) two 48" long 2x4s.
2. Position 68-1/2", 48", and 65-1/2" long 2x4 boards together and mark where the wall studs will be located. Mark the ends that will butt together with the letters 'A', 'B' and 'C'.



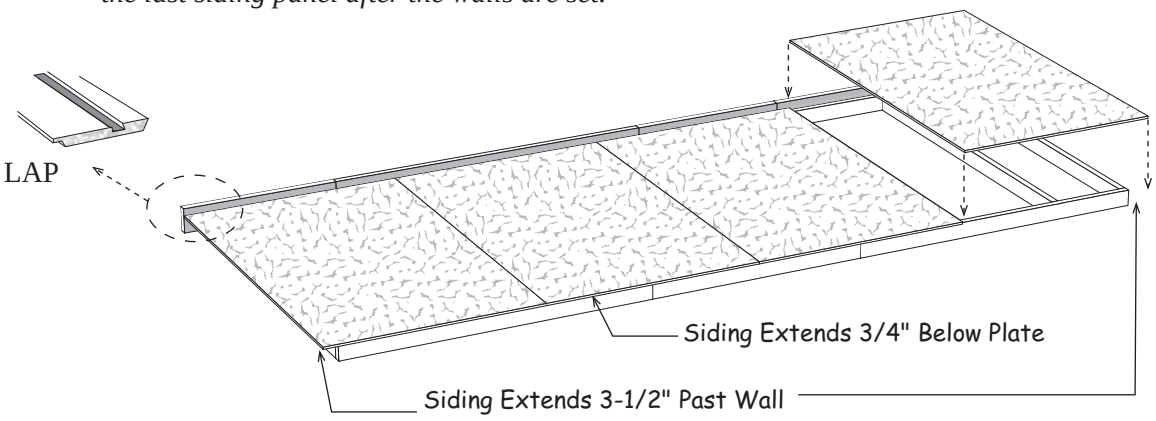
Step 8 Assemble Sidewalls Continued

3. Install 72" wall studs between the top and bottom plates.
4. Nail frames together with 10d sinkers.
5. Install a 48" and (2) two 70-1/2" long 2x6 boards as tie plates over the top plate. The 2x6s will extend 3-1/2" beyond the end of the wall frame.



6. Locate (2) two siding panels that are 77-1/4" long and cut them to a length of 75-3/4" .
7. Square wall frame. Install (4) four 75-3/4" long siding panels. Install the first siding panel with the 'LAP' edge extending 3-1/2" beyond the wall frame.
8. Install (2) two full width siding panel in the center.
9. Cut the last siding panel to extend 3-1/2" beyond the last wall stud.

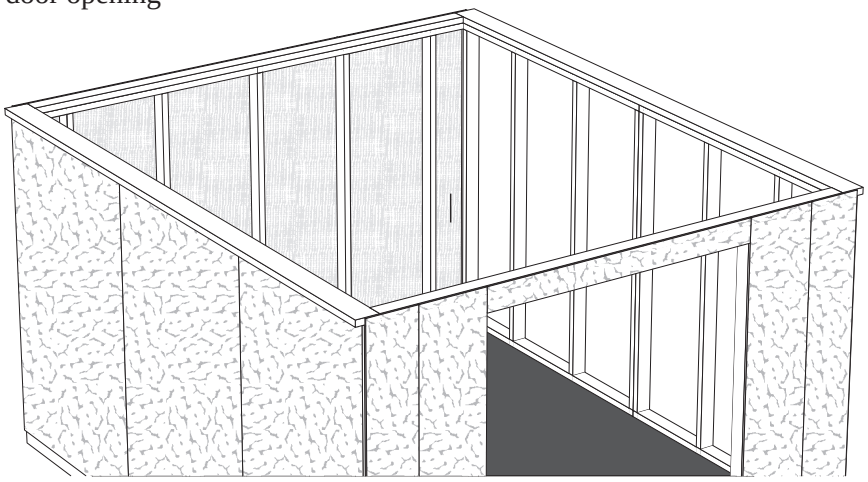
Tip; it will be easier to handle this wall if you install the last siding panel after the walls are set.



10. Assemble another sidewall frame and install (4) siding panels.

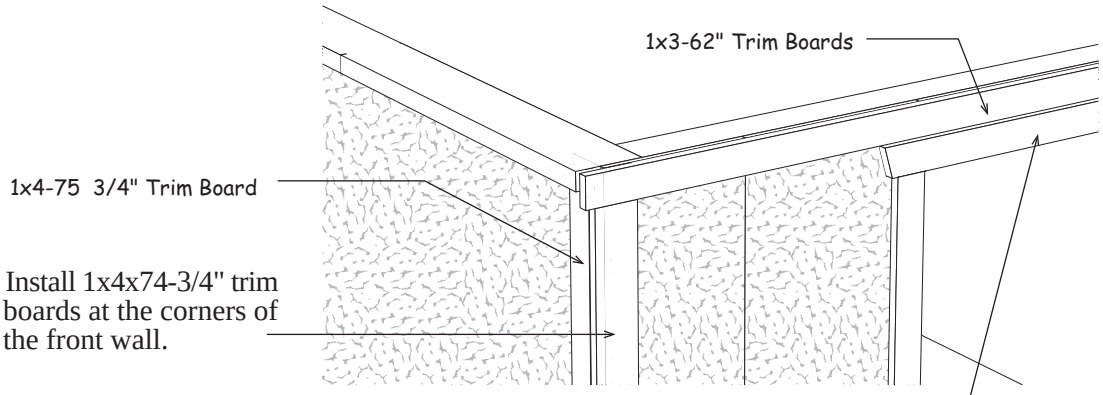
Step 9 Set Lower Walls

1. Secure wall panels together at the corners. Use (4) four 10d coated nails per corner. Nail wall panels to the floor. Nail through the bottom plate. Space 10d sinkers 24" apart. Use 2x4s from the shopping pallet to brace the sidewalls.
2. Cut the 2x4 from door opening



Step 10 Install Trim

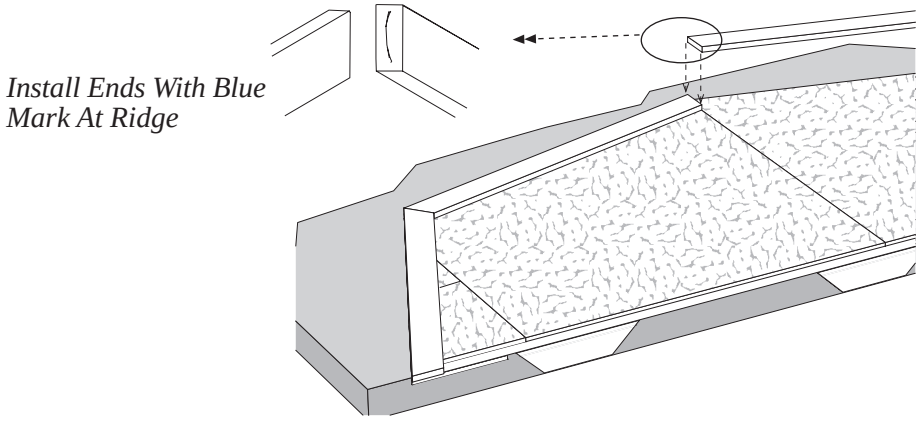
1. Install (2) two 1x3-62" long trim boards flush with the top of the front wall. Use 8d galv. nails.
2. Install 1x4-75 3/4" trim boards at the front corners of the sidewall. Install the trim flush with siding on the front wall.



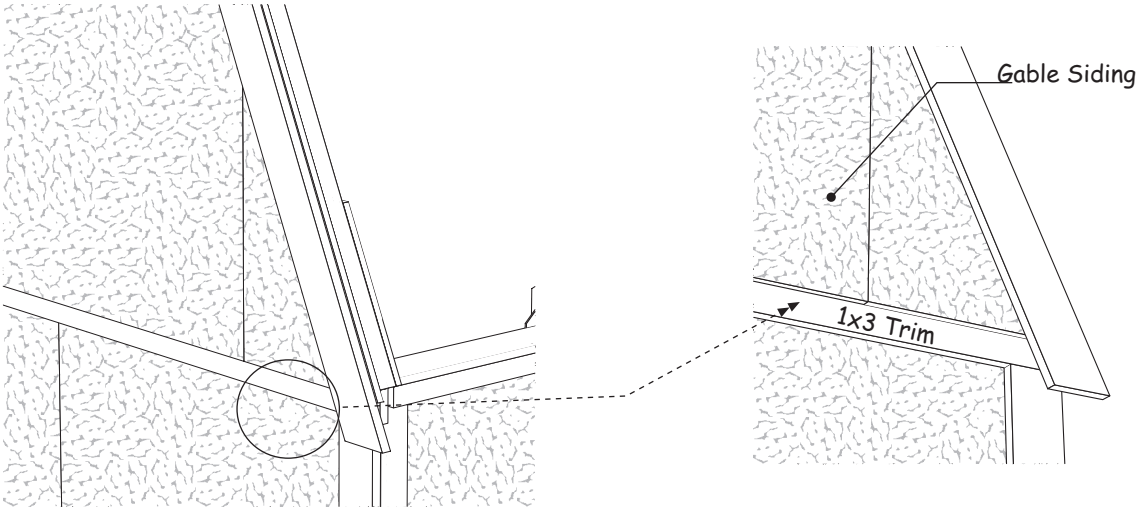
3. Install 1x4x74-3/4" trim boards at the corners of the front wall.
4. Install lx4x72" boards along each side of the door opening. Tack these boards with a couple nails; you may want to move the trim later when you install the doors.
5. Install a 1x4x72" board over the door opening.
6. Install trim on the back of the building.

Step 11 Install Rear Gable

1. Apply 1x4 white pine trim to gable. Install a 47-1/2" long 1x4 at the top of the gable. These boards have a blue marking on one end. Install this end at the peak. Install the 1x4 gable trim extending 1/2" above the siding on the gable. When installed later, the roof sheathing will be flush with the top of the trim.
2. Install a 43" long 1x4 at the sides of the gable, 1/2" above the siding on the gable.



3. Install the rear gable on the back wall. The gable siding will extend over the 1x3 trim on the lower wall. **NOT behind the trim!** Secure gable to wall by nailing through the gable blocks with 10d sinkers. Nail siding along the 1x3 trim board with 6d galv. nails.

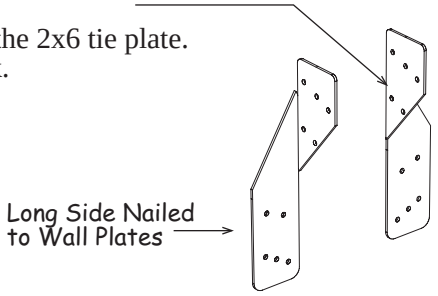


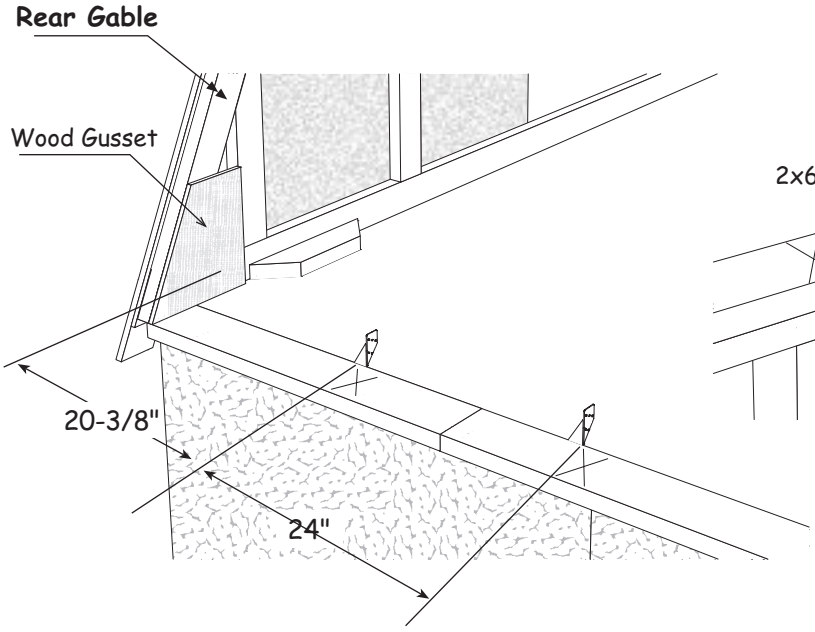
Step 12 Layout for Truss Spacing

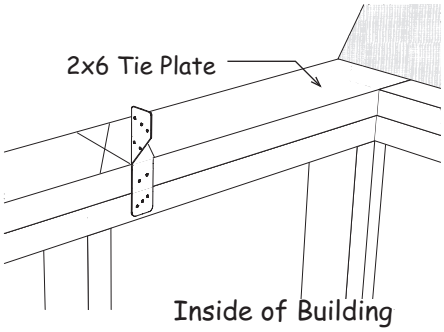
1. Layout the truss spacing on the left sidewall, facing building. Start at the back of the building. Measure from the inside face of the wood gusset when marking the location of the first truss.

2. Locate the truss hangers, there are left and right hangers. Select the right hangers.

3. Using 1-1/2" hanger nails, install the right hangers to the 2x6 tie plate. The top hanger flange should line up with the 'X' mark.



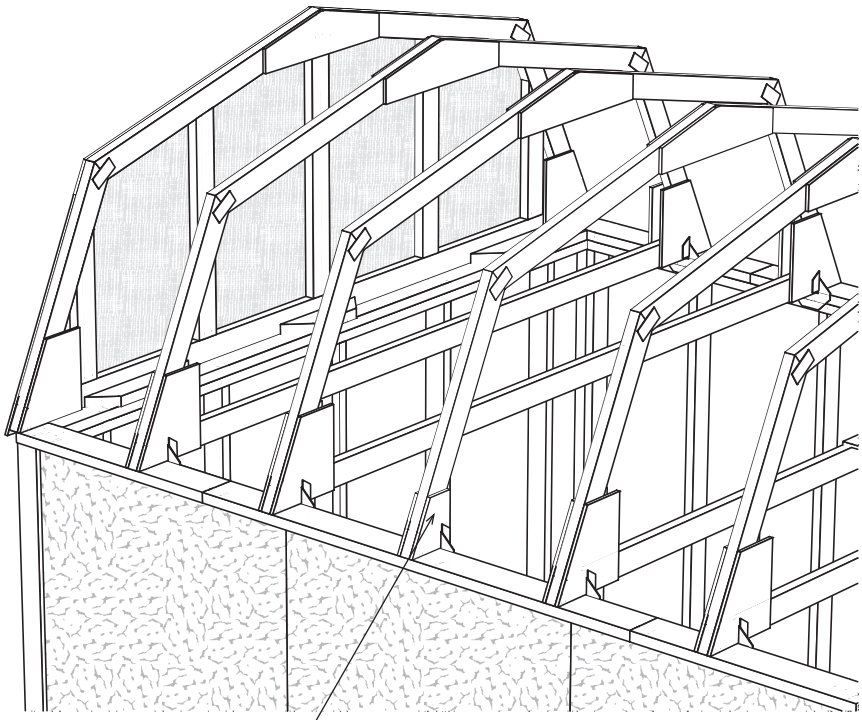




☞ **Important:** When marking the opposite wall, use the left hangers and place the 'X' mark on the same side of the line so your trusses are parallel when they are installed.

Step 13 Install Trusses

1. Install the trusses over the 'X' marks. Install hanger to the opposite side of the trusses. Secure truss to metal hangers using 1-1/2" hanger nails.

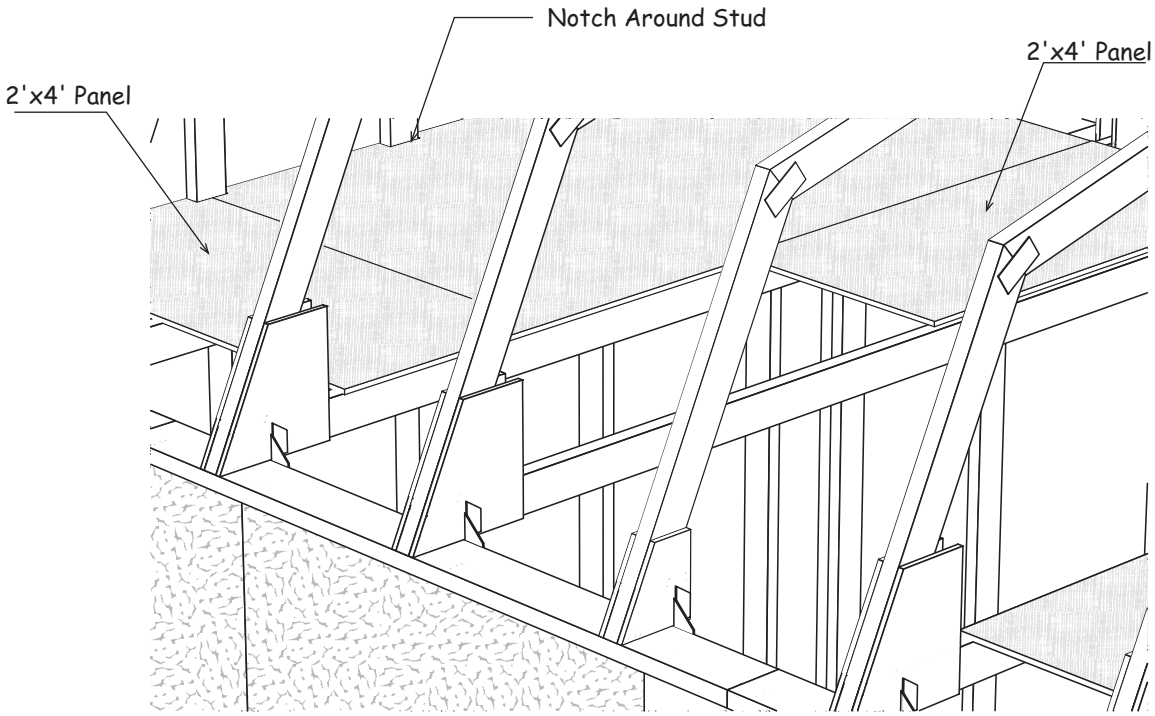


Note: The center truss will not have a bottom cord.

2. Install front gable.

Step 14 Install Loft Floor

1. Install a 4' x 4' OSB flooring panel between the siding on the rear gable and the center of the 2nd truss. Notch the panel around the studs on the gable and cut the width to fit on the center of the 2x4 truss bottom. Note: Some OSB panels may be attached to the shipping pallet. Secure floor with 7d sinkers.
2. Cut and install 2' x 4' OSB panels on each side of the center panel.

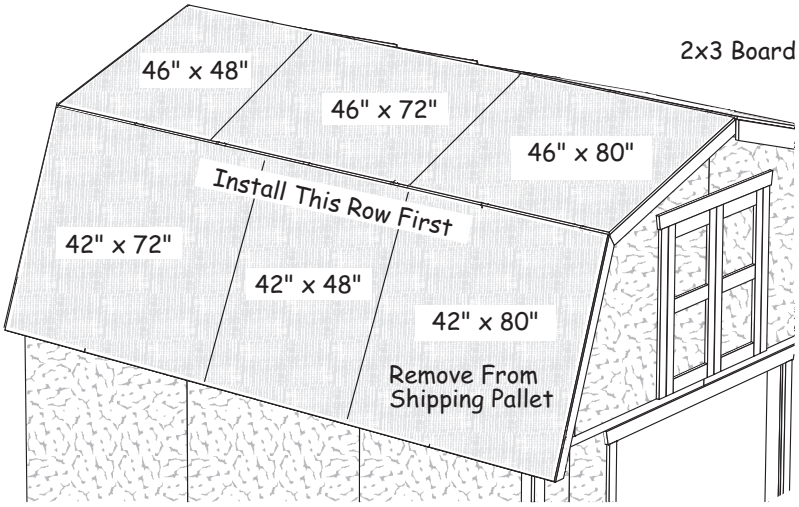


3. Install (2) two 2'x4' pieces as the 2nd row of flooring.
4. Install OSB flooring at the front of the building.

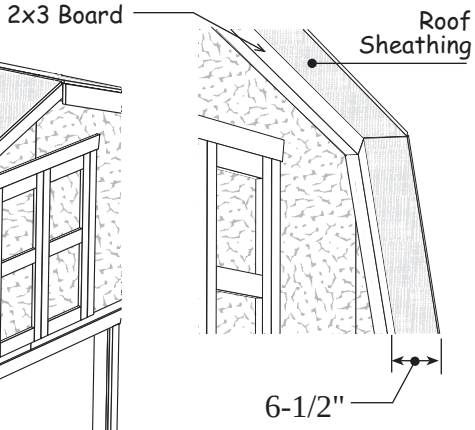
Step 15 Install Roof Sheathing

Install roof sheathing on the steep side of the roof. Use a straight edge to align the top of the sheathing with the top of the truss. See Detail 'B'. Make sure the trusses are plumb and the roof sheathing meets the center of the truss. Use 7d sinkers spaced 12" apart.

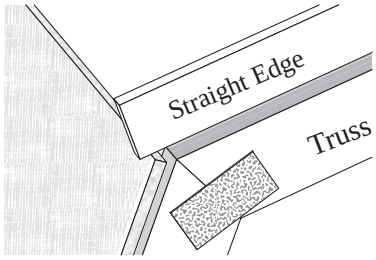
The top roof sheathing will not extend to the ridge. This will allow an opening for air ventilation when you install a ridge vent.



Detail G



☞ **Important:** Make sure the gable is plumb and the roof sheathing extends 6-1/2" past the 2x3s along the face of the gable. See **Detail 'G'**



Detail 'B'

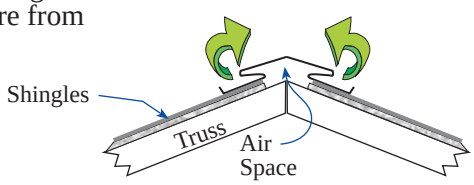
Install Shingles - not included in kit

1. Install felt paper and metal roof edge the permitter of the building.

2. Install shingles according to the instructions on the wrapper. If you need more detailed instructions on installing shingles, there are good publications at book stores or newsstands.

Building Tip: Install ridge vent in lieu of shingles caps. Ridge vent provides ideal ventilation, preventing heat or moisture from damaging your building or its contents.

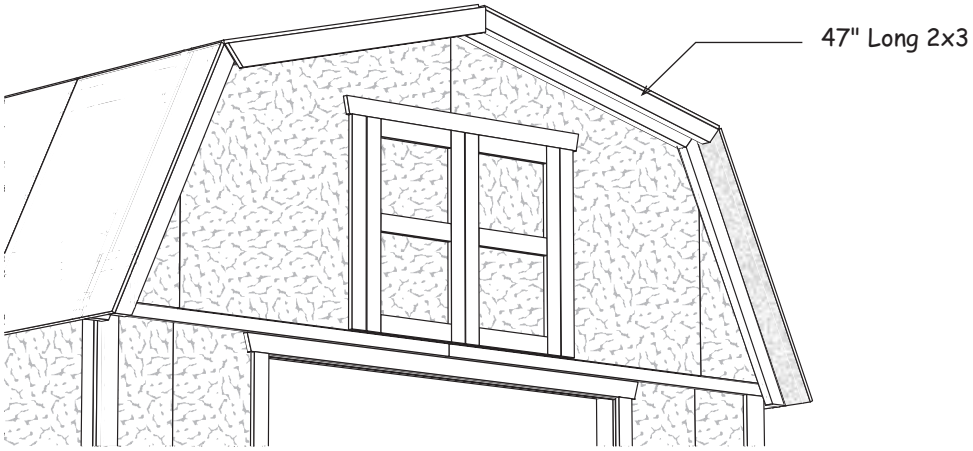
Material Description	Building Length 10'x12'	10'x16'
Roof Shingles	7 bdl.	10 bdl.
Roof 'drip' Edge	6 pcs.	7 pcs.



Ridge vent provides ideal ventilation.

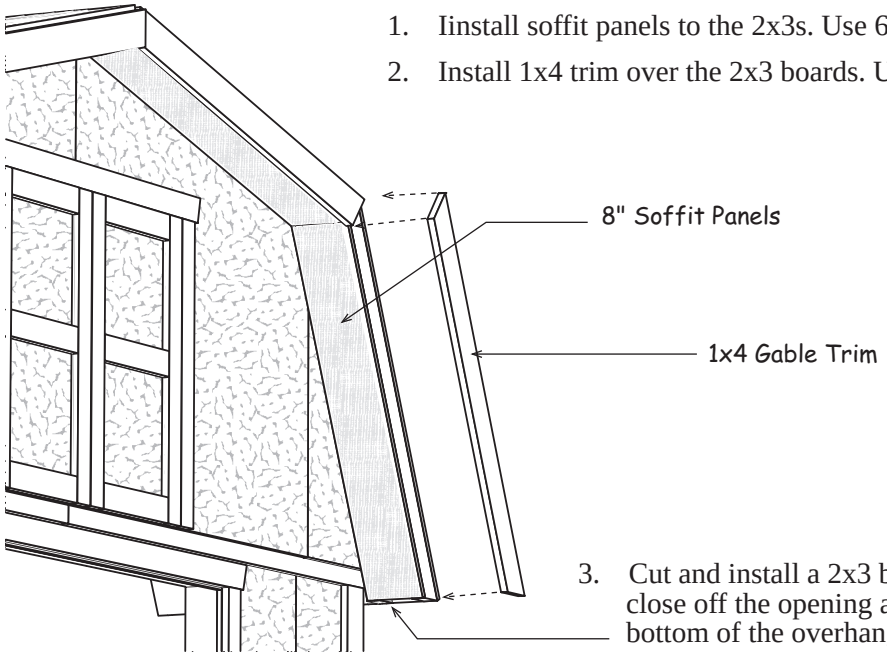
Step 16 Install Gable Overhang

1. While a helper holds the 47" long 2x3s against the front edge of the roof sheathing. Screw the sheathing to the 2x3s with 1-1/2" long screws.
2. Install the 42-1/4" 2x3s on the side roof sheathing in the same manner.



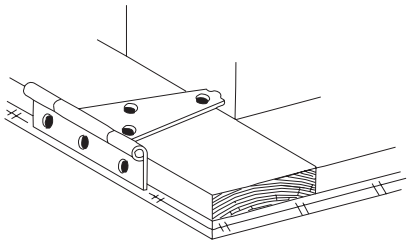
Step 17 Install Gable Soffit and Trim

1. Iinstall soffit panels to the 2x3s. Use 6d galv. nails
2. Install 1x4 trim over the 2x3 boards. Use 8d galv. nails.

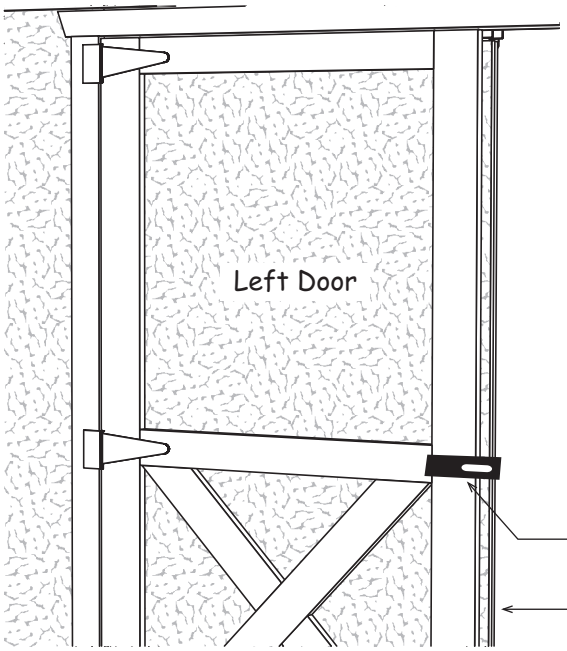


3. Cut and install a 2x3 block to close off the opening at the bottom of the overhang.

Step 18 Install Doors & Hardware

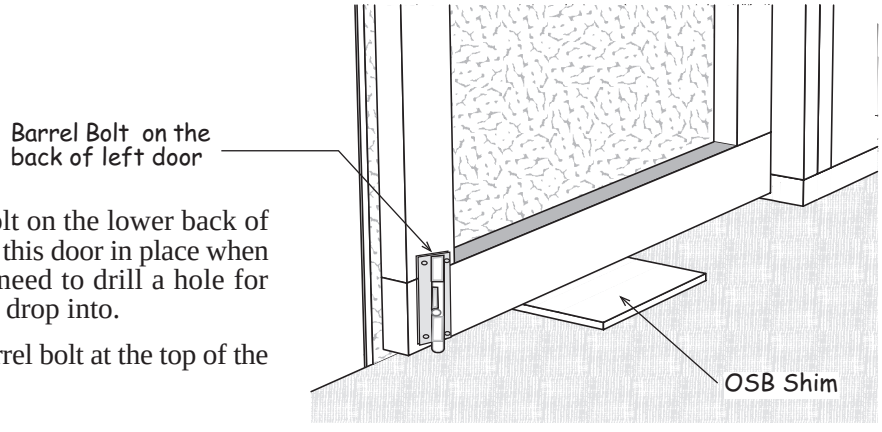


1. Lay the left door with the trim facing up. The siding on the left door extends past the door trim. See detail below.
2. Install 5" hinges to the left side of the door frame. To position the hinge properly, hold the rectangular plate against the frame. Use 1-3/4" black screws.
3. Install hinges to the right side of the other door.



4. Before you fasten the hinges to the door trim, temporarily prop the doors in the opening. Leave a space at the top of the doors and between the doors and the side trim to allow room for the doors to expand when they absorb moisture.

   If your door opening is out of square, the space around the doors will not be even. You can remove and reposition the side trim to make allowances for this. The side trim does not have to be flush with the frame of the door opening. You can move the trim in or out to make the door spacing equal.
5. Install hinges to trim with 2" screws.



6. Install a barrel bolt on the lower back of the door to secure this door in place when closed. You will need to drill a hole for the round shaft to drop into.
7. Install another barrel bolt at the top of the door.

Meadowbrook and Woodville 10'x 16' Barn kit

Qty.	***2x4 & 2x6 Framing***	Size
4	Wall Plates	120 "
8	Truss - Bottom Cords	116 1/4"
8	2x4 Boards Attached to Pallet	80 "
37	Wall Studs black ends	72 "
4	Wall Plates	68 1/2"
4	Wall Plates	65 1/2"
4	Wall Plates	56 1/2"
4	Gable Framing	47 "
4	Gable Framing	38 "
1	Gable Studs & Framing	36 "
1	Gable Studs & Framing	35 3/4"
4	Gable Studs & Framing	34 1/4"
4	Gable Studs & Framing	21 1/2"
9	Truss Ridge Blocks	22 3/4"
6	Gable Nailing Blocks	15 3/4"
2	2x6 Tie Plates for Sidewalls	48 "
4	2x6 Tie Plates for Sidewalls	70 1/2"
	2x3 Framing	
4	Gable Overhangs	47 "
4	Gable Overhangs	42 1/4"
2	Gable Blocks	6 1/4"
	Pre-built Components	
14	Pre-built Truss Halves	
2	32" x 72" Pre-built Barn Doors	
2	18" x 29" Loft Door Frames	
1	2x3 Door Header	67-1/2"
	Loft Floor & Roof Sheathing	
2	42" x 80"	2 42" x 72"
2	46" x 80"	2 46" x 72"
2	48" x 48"	8 24" x 48"
2	42" x 48"	2 46" x 48"

Qty.	***Whie Pine Trim***	Size
4	1x4 Gable Trim	47 1/2"
4	1x4 Gable Trim	43 "
4	1x4 Corner Trim	75 3/4"
4	1x4 Corner Trim	74 3/4"
2	1x4 Door Trim	72 "
1	1x3 Top Door Trim	72 "
4	1x3 Lower Wall Trim	62 "
2	1x3 Loft Door Trim	29 "
1	1x3 Loft Door Trim	42 3/4"
	Exterior Siding & Soffit	
3	48" x77-1/4"	2 12" x 77-1/4"
2	36" x 77-1/4"	6 48" x 75-3/4"
2	16" x 77-1/4"	2 6" x 32-1/4"
4	Siding for Roof Gables	48" x 48"
4	Siding for Roof Gables	16" x 30"
2	Siding For Door Header	6" x 32-3/4"
4	8" x 48" Front Soffit Panels (Woodville model)	
	Hardware	
3	lb. 10d Sinkers	
3	lb. 8d Galv.	28 Truss Hangers
2	lb. 7d Sinkers	75 Hinge Screws
4	lb. 6d Common	1 Door Hasp
1	lb. 6d Galv.	2 4" Barrel Bolts
4	lb. Hanger Nails	2 6" Barrel Bolts
4	4" Door Hinges	12 2-1/2" Screws
6	5" Door Hinges	36 1-1/4" Screws
26	1x4 Drive-on Plate	24 1-5/8" Screws
	Miscellaneous Lumber	
16	Wood Truss Ridge Gussets	8" x 24"
28	Wood Bottom Truss Gussets	12" x 12"
2	Center Truss Blocks w/gusset	3-1/2"x7-1/2"